

Appln. No.: 09/854,560
Docket No.: 66376-252-7
Supplemental Amdt. Dated Mar. 16, 05
Reply to Office Action of Oct. 5, 04

IN THE CLAIMS:

1. (Previously Presented) A method for automation of the management of operating materials and/or supplies of an analyzer or analyzing system for determining a parameter or a parameter group of a sample, being used in medical, environmental or food technology, comprising:

(a) automatic recording of type and maximum useful life of said operating materials used, and of types, expiry dates and quantities of said required supplies,

(b) entering a desired frequency of analysis, or automatic calculation of an estimated frequency of analysis from past frequencies of use of said analyzer or analyzing system,

(c) automatic calculation of said operating materials and/or supplies required per unit of time, based on data obtained in steps (a) and (b),

(d) determining an optimum point in time for ordering said required operating materials and/or supplied, and

(e) automated ordering of said operating materials and/or supplies via a device for remote data transmission.

2. (Previously Presented) A method according to claim 1, wherein said automated ordering in step (e) is conducted via an internet connection.

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3. **(Previously Presented)** A method according to claim 1, wherein a unit for remote data transmission is used to provide an internet portal for information on products, software, service maintenance, and use, in the fields of medical, environmental and food technology.

4. **(Original)** A method according to claim 3, wherein said information on products, software, service, maintenance, and use, is updated each time an automatic order is placed according to step (e).

5. **(Original)** A method according to claim 1, wherein in step (a) said data of at least one operating material of a group consisting of electrochemical and optochemical sensors of said analyzer, and said data of at least one supply material of a group consisting of washing, calibrating and quality control media required for cleaning, calibration and quality control of said sensors is recorded.

6. **(Previously Presented)** A method according to claim 1, wherein for calculation of said operating materials and supplies required per unit of time according to step (c) a desired range or desired availability of said analyzer is entered.

7. **(Original)** A method according to claim 1, wherein automatic ordering of operating materials and supplies either is proposed by said analyzer and confirmed by an user or is effected fully automatically by said analyzer after a corresponding function has been activated once.

8. **(Previously Presented)** A method according to claim 1, wherein subsequent to said automated ordering of said operating

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materials and supplies according to step (e) a confirmation of delivery is waited for and, if delivery is delayed, a warning is displayed on said analyzer.

9. (Previously Presented) A method according to claim 8, wherein in situations of delayed delivery of said operating materials and supplies calibration and quality control cycles of said analyzer are correspondingly extended.

10. (Previously Presented) A method according to claim 8, wherein in situations of delayed delivery of said operating materials and supplies calibration and quality control cycles of said analyzer are switched over to an emergency or economy program.

11. (Original) A method according to claim 1, wherein said data obtained in steps (a) and (b) are used to calculate service and maintenance intervals, and respective service and maintenance jobs are requested or ordered via said automatic remote data transmission.

12. (Original) A method according to claim 11, wherein said service and maintenance jobs are requested via an Internet connection.

13. (Original) A method according to claim 1, wherein error messages arriving from hardware or software components of said analyzer are recorded, and respective service and maintenance jobs are requested or ordered via said automatic remote data transmission.

14. (Original) A method according to claim 13, wherein said service and maintenance jobs are requested via an internet connection.

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15. **(Original)** A method according to claim 5, wherein an automatic order is initiated according to step (e) in response to a negative result returned by a calibrating or quality control step of said analyzer.

16. **(Previously Presented)** A method according to claim 2, wherein a user is offered a help function via said internet connection, as well as access to user groups, a user center, and electronic information media.

17. **(Original)** A method according to claim 2, wherein said internet connection is used for remote repair of hardware or software components of said analyzer.

18. **(Original)** A method according to claim 1, wherein said data collected automatically by said analyzer in steps (a) to (c) are used to analyze consumer behavior and/or calculate effective costs for each analysis, and wherein demand-optimized analyzers or analyzing systems as well as cost-optimized service and maintenance packages are offered on the basis of this information.

19. **(Currently Amended)** Analyzer or analyzing system for determining a parameter or a parameter group of a sample, being used in medical, environmental or food technology, comprising a device for automatic recording of type and maximum useful life of said operating materials used, and of ~~types, expiry dates and quantities of said supplied~~ ~~used, types, expiry dates and quantities of said supplies used~~, wherein a device is provided for automatically calculating an estimated frequency of

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analysis from past frequencies of use of said analyzer, or a device for entering a desired frequency of analysis, and wherein said analyzer includes a device for calculating said operating materials and/or supplies required per unit of time in dependence on said data on operating materials and supplies and said frequency of analysis, and wherein said analyzer is further provided with a connection for remote data transmission for purposes of automated transmission of data concerning product ordering, service and maintenance.

20. **(Original)** An analyzing system according to claim 19, wherein said connection for remote data transmission is an internet connection.

21. **(Previously Presented)** An analyzing system for determination of medical sample parameters according to claim 19, wherein said connection for remote data transmission is provided in a computer-supported central unit of said analyzing system, and wherein at least one independent single analyzer is provided for determining one sample parameter or one sample parameter group, and wherein said single analyzers are coupled to said central unit in a first position, and are removable from said first position in order to be inserted in a second position.

22. **(Previously Presented)** An analyzing system according to claim 21, wherein a bus system is provided for establishing releasable contact between each of said single analyzers, as well as for establishing

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releasable contact between said single analyzer and said central unit in said first position.

23. **(Original)** An analyzing system according to claim 22, wherein said bus system is provided with a data bus to establish a data link between said single analyzers and said control unit.

24. **(Original)** An analyzing system according to claim 22, wherein said bus system is provided with a fluid bus to exchange washing, calibrating and quality control media between said single analyzers and said control unit.

25. **(Original)** An analyzing system according to claim 22, wherein said bus system is provided with a sample bus to exchange the samples to be tested between said single analyzers and said control unit.

26. **(Original)** An analyzing system according to claim 22, wherein said bus system is provided with an energy supply bus.

27. **(Original)** Analyzer or analyzing system for applications in medical, environmental or food technology, wherein said analyzer or analyzing system is provided with a connection for remote data transmission, for the purpose of automated transmission of data on product ordering, service and maintenance, and is configured as an internet portal for information, especially information on products, software, service, maintenance, and use, in the fields of medical, environmental or food technology.

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28. **(Original)** An analyzing system according to claim 19, wherein said analyzer or analyzing system is provided with a data link to a laboratory information system LIS, a hospital information system HIS and further laboratory systems.

29. **(Original)** An analyzing system according to claim 27, wherein said analyzer or analyzing system is provided with a data link to a laboratory information system LIS, a hospital information system HIS and further laboratory systems.

30. **(Original)** An analyzing system according to claim 29, wherein said data transfer is effected by means of wireless technology in the 2.4 GHz range, utilizing a license-free ISM band.

31. **(Previously Presented)** An automation process for the management of operating materials and supplies of an analyzer or analyzing system for determining a parameter or a parameter group of a sample, being used in medical, environmental or food technology, comprising the following steps:

(a) automatic recording of type and maximum useful life of said operating materials used, and of types, expiry dates and quantities of said required supplies,

(b) entering a desired frequency of analysis, or automatic calculation of an estimated frequency of analysis from past frequencies of use of said analyzer or analyzing system,

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(c) automatic calculation of said operating materials and supplies required per unit of time, based on data obtained in steps (a) and (b),

(d) determining an optimum point in time for ordering said required operating materials and supplies, and

(e) automated ordering of said operating materials and supplies via a device for remote data transmission, where the ordering is proposed by the analyzer and confirmed by a user, or is effected fully automatically by the analyzer after a corresponding function has been activated once.

32. (Currently Amended) Analyzer or analyzing system for determining a parameter or a parameter group of a sample, being used in medical, environmental or food technology, comprising a device for automatic recording type and maximum useful life of ~~said~~ operating materials used, and of types, expiry dates and quantities of ~~said~~ supplies used, including a device for automatically calculating an estimated frequency of analysis from past frequencies of use of said analyzer, or a device for entering a desired frequency of analysis, and said analyzer includes a device for calculating said operating materials and supplies required per unit of time in dependence on said data on operating materials and supplies and said frequency of analysis, and said analyzer is further provided with a connection for remote data transmission for

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purposes of automated transmission of data concerning product ordering,
service and maintenance.